STARTLE BEHAVIOR IN AN ASCALAPHID (NEUROPTERA)

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According to van der Weele (1908), male Ascalaphidae of the genera Byas and Haploglenius have a peculiar hinged flap covering the pronotum. The flap is more or less developed in different species, and in some conceals a bright pronotal patch. No mobility or function was ascribed to the flap. On November 17, 1968, while blacklighting at the Smithsonian Tropical Research Station, Barro Colorado Island, Canal Zone, one of us (T.E.) had occasion to observe the response to manipulation of a male of Haploglenius luteus that had come to rest at the light. Every time the insect was poked or seized, it abruptly exposed its patch, which in this species is brilliantly white-pruinose and contrasts sharply with the drab remainder of the body (Figs. 1-3). We suggest that this "flashing" behavior is defensive in function. Whether it merely startles predators or serves also as reinforcement of distastefulness cannot be said, since nothing is known about the palatability of Haploglenius (some ascalaphids have a bad stench and may be distasteful). The startling function need not be the only, or for that matter primary, function of the flap. Since the device is restricted to one sex, it probably serves also for signalling purposes in courtship.

LITERATURE CITED

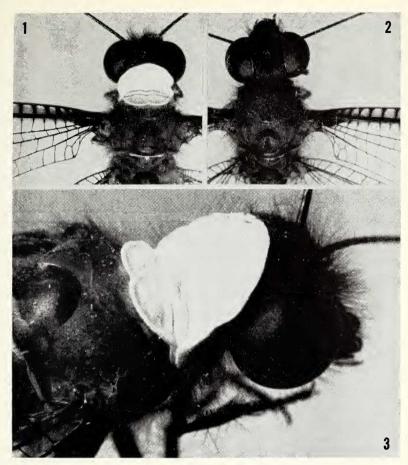
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Figs. 1-3. Haploglenius luteus (3), with the thoracic patch exposed as in the startle display (fig. 1, 3), and concealed beneath the pronotal flap as it ordinarily is in the undisturbed animal (fig. 2).